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**WATER AND SEWER
BOND SALES
IN THE UNITED STATES**

January-December 1964

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**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service**

**WATER AND SEWER
BOND SALES IN THE UNITED STATES
January-December 1964**

**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Division of Water Supply and Pollution Control
Basic Data Branch
Washington, D.C. 20201**

Other Publications in the Series

Water and Sewer Bond Sales in the United States, 1963
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INTRODUCTION

This annual report of Water and Sewer Bond Sales in the United States contains data which are basic and necessary to the orderly and efficient management of water supply and pollution control programs. It reflects, in a measure, the extent of financing to fulfill these two important public services in a growing nation. The report also provides a ready source of economic reference for financial, investment and banking interests; for the building and contracting trades and professions; and for authorities responsible for providing public water supplies and sewerage systems. The publication series, over the years, is a good indicator of interest rate and construction cost trends in these two types of public utility.

The tables supplement the annual publication of contract award data, last reported in *Sewage and Water Works Construction 1964*. (PHS Publication No. 758.) Similar tables which describe bonds sold between July 1956 and December 1963 are available. The basic information from which these tables were developed was obtained from the Investment Bankers Association by special arrangement. It is believed these tables present information not otherwise readily available.

Data are presented in three categories according to the use of the proceeds from the sale: (1) WATER when the bonds have been sold to finance water facilities; (2) SEWER, to finance sewage facilities; and (3) COMBINATION, to finance jointly water and sewage facilities where the portions attributable to each type are not designated. Data describing bonds sold to finance other types of construction in combination with

water and/or sewage facilities construction are excluded. Data describing bonds sold to finance storm sewers are omitted, although these data are available.

It should also be noted that these data describe only those sales reported to the Investment Bankers Association or assembled by that Association from available documents. Locally negotiated sales that may not be reported in bond publications or by State agencies responsible for controlling municipal bond sales are not included. Thus, these tabulations need to be considered as meaning "at least this much." By dollar value of sales, coverage is believed to be nearly complete.

Net interest cost figures shown on pages 8-10 are presented by month, by Moody rating, by dollar size of the bond issue, by population size, and by issuing authority. The figures listed are weighted averages, data being weighted by dollar amount of the issues. Similar tabulations are available for the years 1959 through 1963.

Water and sewer bond sales for 1964 totaled \$1,485 million which was 12 percent over 1963. Bonds for financing water facilities accounted for \$769 million, while those for building sewage treatment facilities and laying collecting sewers amounted to \$551 million. In addition, bonds totaling \$165 million were intended for use in combination projects for both water and sewerage construction. California again had the largest dollar volume as well as number of issues. Hawaii, Puerto Rico, and the District of Columbia reported no sales.

TOTAL BOND SALES
1957-1964
(Million dollars)
BY YEAR

Year	Total		Water		Sewer		Combination	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
1957-----	1,414	1,009	573	483	674	408	167	118
1958-----	1,492	1,045	610	405	715	526	167	114
1959-----	1,312	1,073	531	530	608	433	173	110
1960-----	1,382	1,003	587	499	614	389	181	115
1961-----	1,442	1,226	563	545	709	570	170	111
1962-----	1,240	1,119	495	418	606	594	139	107
1963-----	1,533	1,319	559	613	732	524	242	181
1964-----	1,474	1,485	607	769	661	551	206	165

BOND SALES
January-December 1964
(Thousand dollars)
BY MONTH

Month	Total		Water		Sewer		Combination	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
January-----	128	102,601	56	37,513	58	50,210	14	14,878
February-----	100	208,150	28	127,938	57	74,744	15	5,468
March-----	141	75,488	61	30,891	53	30,594	27	14,003
April-----	154	136,360	59	48,927	73	73,057	22	14,376
May-----	116	142,469	49	96,236	52	33,921	15	12,312
June-----	152	126,662	55	53,234	72	57,947	25	15,481
July-----	121	98,459	47	14,360	57	60,857	17	23,242
August-----	132	85,025	59	39,416	58	39,159	15	6,450
September-----	124	118,483	46	56,178	58	52,391	20	9,914
October-----	113	214,292	56	171,941	47	33,786	10	8,565
November-----	111	114,597	56	57,055	43	24,451	12	33,091
December-----	82	62,149	35	35,618	33	19,598	14	6,933
Total-----	1,474	1,484,735	607	769,307	661	550,715	206	164,713

BOND SALES
January–December 1964
 (Thousand dollars)
BY ISSUING AUTHORITY

Issuing Authority	Total		Water		Sewer		Combination	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
State-----	9	258,495	3	250,000	6	8,495	-----	-----
County-----	31	70,387	9	12,849	16	42,808	6	14,730
Municipality-----	986	722,182	381	305,798	437	296,034	168	120,350
Township-----	52	19,186	21	5,653	28	11,520	3	2,013
Special district-----	294	265,665	157	102,805	122	153,963	15	8,897
Statutory authority-----	102	148,820	36	92,202	52	37,895	14	18,723
Total-----	1,474	1,484,735	607	769,307	661	550,715	206	164,713

BOND SALES
January–December 1964
 (Thousand dollars)
BY DOLLAR SIZE OF ISSUE

Dollar size of bond issue	Total		Water		Sewer		Combination	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Under 50,000-----	149	4,074	71	1,936	70	1,919	8	219
50,000–100,000-----	208	14,654	99	6,841	92	6,594	17	1,219
100,000–200,000-----	268	35,953	116	15,220	110	14,944	42	5,780
200,000–500,000-----	354	107,775	143	42,127	145	45,853	66	19,795
500,000–1,000,000-----	214	148,676	79	56,051	102	68,562	33	24,063
1,000,000–2,000,000---	134	182,757	32	44,588	77	104,564	25	33,605
2,000,000–5,000,000---	96	294,906	44	139,075	44	133,369	8	22,462
5,000,000–10,000,000--	35	224,170	12	79,960	18	116,410	5	27,800
Over 10,000,000-----	16	471,770	11	383,500	3	58,500	2	29,770
Total-----	1,474	1,484,735	607	769,307	661	550,715	206	164,713

BOND SALES
January-December 1964
 (Thousand dollars)
BY STATE

State	Total		Water		Sewer		Combination	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Alabama.....	13	13,199	3	9,075	4	2,109	6	2,015
Alaska.....	3	600	2	525	1	75		
Arizona.....	7	10,125	3	2,625	3	5,250	1	2,250
Arkansas.....	4	14,850	1	3,500	3	11,350		
California.....	117	341,667	68	305,250	45	35,087	4	1,330
Colorado.....	22	58,067	10	21,799	8	33,230	4	3,038
Connecticut.....	18	18,900	5	3,715	13	15,185		
District of Columbia.....								
Delaware.....	2	375	1	300	1	75		
Florida.....	21	31,729	5	11,950	4	5,210	12	14,560
Georgia.....	14	21,289	5	6,125			9	15,164
Hawaii.....								
Idaho.....	3	896	1	125	2	771		
Illinois.....	91	72,704	37	33,790	40	33,112	14	5,802
Indiana.....	26	18,052	9	2,047	17	16,005		
Iowa.....	18	5,548	4	1,163	14	4,385		
Kansas.....	31	8,128	7	578	23	6,735	1	815
Kentucky.....	54	23,849	20	5,919	17	2,904	17	15,026
Louisiana.....	44	13,816	27	7,785	15	5,480	2	551
Maine.....	3	560	2	370	1	180		
Maryland.....	24	55,310	8	18,555	13	25,615	3	11,140
Massachusetts.....	106	51,962	57	20,544	49	31,418		
Michigan.....	124	127,976	55	86,239	59	35,708	10	6,020
Minnesota.....	44	21,523	7	2,509	32	17,277	5	1,737
Mississippi.....	27	16,350	6	830	6	2,430	15	13,090
Missouri.....	20	25,426	4	185	9	21,512	7	3,720
Montana.....	6	804	2	435	4	369		
Nebraska.....	3	19,170	1	17,000	2	2,170		
Nevada.....	4	7,678	1	522	3	7,156		
New Hampshire.....	10	5,204	4	1,084	6	4,120		
New Jersey.....	56	24,055	28	12,148	28	11,907		
New Mexico.....	5	7,433	3	3,393	2	4,040		
New York.....	68	50,885	41	30,031	25	19,022	2	1,332
North Carolina.....	72	31,673	24	10,744	43	18,575	5	2,354
North Dakota.....	1	115					1	115
Ohio.....	73	50,651	27	24,513	40	23,878	6	2,202
Oklahoma.....	26	8,692	16	7,659	6	513	4	520
Oregon.....	41	14,088	24	3,817	17	10,271		
Pennsylvania.....	78	96,682	24	36,777	47	33,315	7	26,690
Puerto Rico.....								
Rhode Island.....	12	4,500	6	1,065	6	2,835		
South Carolina.....	8	6,254	3	3,875	4	2,230	1	140
South Dakota.....	3	609	1	225	1	59	1	325
Tennessee.....	19	25,977	4	9,400	6	12,554	9	4,023
Texas.....	78	64,978	22	26,292	8	17,227	48	21,450
.....	5	2,320	2	850	3	1,470		
.....	2	307			2	307		
.....	16	31,860	8	17,675	3	10,910	5	3,875
.....	25	39,685	10	2,298	10	35,070	5	2,317
.....	8	10,363	2	6,790	5	1,938	1	1,625
Wisconsin.....	17	26,296	7	6,711	10	19,585		
Wyoming.....	2	2,075			1	75	1	2,000
Total.....	1,474	1,484,735	607	769,307	661	550,715	206	164,713

BOND SALES
January-December 1964
 (Thousand dollars)
BY POPULATION OF ISSUING AUTHORITY

Population size of issuing authority	Total		Water		Sewer		Combination	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
Under 10,000-----	757	213,053	300	70,097	331	101,467	126	41,489
10,000-25,000-----	224	126,316	92	42,830	90	50,602	42	32,884
25,000-50,000-----	134	139,603	49	61,994	68	50,849	17	26,760
50,000-100,000-----	112	137,493	50	64,339	54	53,372	8	19,782
100,000-250,000-----	57	95,742	22	36,330	29	45,214	6	14,198
250,000-500,000-----	31	92,575	10	20,270	20	70,405	1	1,900
500,000-1,000,000-----	51	172,064	22	71,933	26	98,726	3	1,405
Over 1,000,000-----	31	288,479	12	210,879	18	57,830	1	19,770
Unidentified-----	77	219,410	50	190,635	25	22,250	2	6,525
Total-----	1,474	1,484,735	607	769,307	661	550,715	206	164,713

BOND SALES
January-December 1964
 (Thousand dollars)
BY TYPE OF ISSUE

Type of issue	Total		Water		Sewer		Combination	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
<i>General obligation bonds</i>								
Unlimited Tax-----	851	875,430	374	467,914	423	352,902	54	54,623
Unlimited Tax Secured By:								
Utility Revenue-----	17	17,345	9	6,810	6	9,760	2	975
Special Assessment-----	77	20,520	22	3,654	53	15,298	2	1,568
Limited Tax-----	27	31,124	12	11,000	12	18,097	3	1,937
Limited Tax Secured By:								
Utility Revenue-----	3	2,893	1	522	2	2,371	-----	-----
Special Assessments-----	27	10,462	4	995	22	9,538	1	229
<i>Revenue bonds</i>								
Utility Revenue-----	403	515,334	179	271,043	141	141,710	143	102,581
Special Tax Revenue-----	4	3,961	1	122	2	1,039	1	2,800
Rental Revenue-----	5	7,057	5	7,657	-----	-----	-----	-----
Total-----	1,474	1,484,735	607	769,307	661	550,715	206	164,713

GENERAL OBLIGATION BOND SALES

January-December 1964

(Thousand dollars)

BY NET INTEREST COST RANGES

Net interest cost range midpoint (percent)	Total		Water		Sewer		Combination	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
2.000								
2.250	1	75	1	75				
2.500	5	525	3	258	2	267		
2.750	42	30,376	16	2,673	26	27,703		
3.000	179	179,700	72	52,930	106	125,927	1	843
3.250	201	208,798	83	79,104	109	100,483	9	29,211
3.500	156	354,572	69	268,640	73	73,674	14	12,258
3.750	102	77,226	39	50,264	55	21,891	8	5,071
4.000	83	34,049	37	11,074	38	20,339	8	2,636
4.250	29	10,272	18	3,294	11	6,978		
4.500	22	13,693	15	10,900	6	2,474	1	319
4.750	13	4,780	6	1,099	6	2,781	1	900
5.000	3	204	1	57	2	147		
5.250	1	245			1	245		
5.500	1	240					1	240
N.I.C. unknown	164	43,028	62	10,117	83	25,057	19	7,854
Total	1,002	957,783	422	490,485	518	407,966	62	59,332

REVENUE BOND SALES
January-December 1964
 (Thousand dollars)
BY NET INTEREST COST RANGES

Net interest cost range midpoint (percent)	Total		Water		Sewer		Combination	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
2.000.....								
2.250.....								
2.500.....	1	3,500			1	3,500		
2.750.....	1	740	1	740				
3.000.....	11	24,558	10	24,078			1	480
3.250.....	49	83,197	28	52,312	12	25,650	9	5,235
3.500.....	56	149,348	18	108,217	15	19,149	23	21,982
3.750.....	106	123,230	32	40,320	37	54,169	37	28,741
4.000.....	55	52,970	19	17,328	18	9,526	18	26,116
4.250.....	33	17,202	10	3,322	16	12,537	7	1,343
4.500.....	6	6,152	3	760	2	392	1	5,000
4.750.....	2	258	2	258				
5.000.....	6	1,269	4	534	1	445	1	290
5.250.....	1	212	1	212				
5.500.....	2	337	1	225			1	112
N.I.C. Unknown.....	143	63,979	56	30,516	41	17,381	46	16,082
Total.....	472	526,952	185	278,822	143	142,749	144	105,381

BOND SALES
NET INTEREST COST
January-December 1964
(Percent)
BY MONTH

Month	Total		Water		Sewer	
	General obligation	Revenue	General obligation	Revenue	General obligation	Revenue
January-----	3.19	3.81	3.24	3.77	3.17	3.68
February-----	3.37	3.60	3.45	3.56	3.20	3.71
March-----	3.38	3.72	3.51	3.52	3.23	3.94
April-----	3.39	3.62	3.49	3.44	3.32	3.61
May-----	3.49	3.51	3.49	3.54	3.49	3.44
June-----	3.32	3.46	3.43	3.25	3.22	3.76
July-----	3.34	3.80	3.55	3.72	3.31	3.66
August-----	3.48	3.49	3.63	3.44	3.36	3.51
September-----	3.40	3.58	3.49	3.46	3.30	3.77
October-----	3.53	3.52	3.59	3.54	3.24	3.42
November-----	3.31	3.45	3.31	3.35	3.28	3.93
December-----	3.42	3.44	3.64	3.33	3.23	3.93

BOND SALES
NET INTEREST COST
January-December 1964
(Percent)
BY MOODY RATING

Moody rating	Total		Water		Sewer	
	General obligation	Revenue	General obligation	Revenue	General obligation	Revenue
AAA-----	3.03	-----	3.30	-----	3.00	-----
AA-----	3.39	3.32	3.49	3.31	3.19	3.31
A-----	3.25	3.39	3.21	3.41	3.22	3.21
BAA-----	3.56	3.77	3.70	3.66	3.40	3.71
BA-----	3.89	4.02	3.77	-----	3.97	3.93
B-----	4.50	-----	4.52	-----	4.43	-----
CA-----	3.39	-----	-----	-----	3.39	-----
Unknown-----	3.42	3.78	3.51	3.69	3.29	3.82

BOND SALES
NET INTEREST COST
January-December 1964
(Percent)
BY DOLLAR SIZE OF ISSUE

Dollar size of bond issue	Total		Water		Sewer	
	General obligation	Revenue	General obligation	Revenue	General obligation	Revenue
Under 50,000-----	3.54	3.88	3.58	4.08	3.49	3.61
50,000-100,000-----	3.46	3.87	3.44	3.91	3.49	3.80
100,000-200,000-----	3.46	3.91	3.48	3.97	3.42	4.02
200,000-500,000-----	3.47	3.84	3.44	3.86	3.45	3.93
500,000-1,000,000-----	3.44	3.70	3.56	3.56	3.29	3.84
1,000,000-2,000,000-----	3.42	3.65	3.53	3.57	3.37	3.70
2,000,000-5,000,000-----	3.31	3.51	3.35	3.47	3.29	3.39
5,000,000-10,000,000-----	3.18	3.60	3.64	3.46	3.00	3.65
Over 10,000,000-----	3.46	3.44	3.51	3.37	3.26	-----

BOND SALES
NET INTEREST COST
January-December 1964
(Percent)
BY POPULATION SIZE OF ISSUING AUTHORITY

Population size of issuing authority	Total		Water		Sewer	
	General obligation	Revenue	General obligation	Revenue	General obligation	Revenue
Under 10,000-----	3.57	3.84	3.57	3.77	3.54	3.88
10,000-25,000-----	3.34	3.67	3.36	3.68	3.28	3.74
25,000-50,000-----	3.46	3.63	3.60	3.58	3.27	3.22
50,000-100,000-----	3.23	3.66	3.17	3.58	3.26	3.58
100,000-250,000-----	3.25	3.43	3.26	3.34	3.24	3.31
250,000-500,000-----	3.25	3.32	3.20	3.31	3.25	3.40
500,000-1,000,000-----	3.19	3.58	3.31	3.38	3.10	3.73
Over 1,000,000-----	3.44	3.48	3.56	3.48	3.02	-----
Unidentified-----	3.54	3.20	3.52	3.17	3.74	3.59

BOND SALES
NET INTEREST COST
January-December 1964
(Percent)
BY ISSUING AUTHORITY

Issuing authority	Total		Water		Sewer	
	General obligation	Revenue	General obligation	Revenue	General obligation	Revenue
State.....	3.53	-----	3.55	-----	3.05	-----
County.....	3.21	4.15	3.66	3.70	3.10	4.34
Municipality.....	3.28	3.55	3.32	3.46	3.22	3.58
Township.....	3.38	3.75	3.38	3.94	3.37	3.76
Special district.....	3.51	3.48	3.75	3.27	3.39	4.07
Statutory authority.....	3.27	3.66	3.15	3.59	3.43	3.79

